multiplying a texture value at a pixel by the original pixel value of the picture image to generate the frame prototype image.

The Office Action stated:

As per claim 1, Oles discloses a method of generating a frame prototype image showing a picture image framed within a frame, the method comprising:
providing a frame image showing the frame in a perspective view, the frame image having a picture portion corresponding to the portion of the frame used to view a picture mounted in the frame (Figure 4 26); and
mapping the picture image to the picture portion of the frame image in order to generate the frame prototype image (Figure 3 24 to Figure 4 24).

Oles discloses a method of generating a frame prototype image. It is noted that Oles does not explicitly disclose "multiplying a texture value at a pixel by the original pixel value of the picture image to generate the frame prototype image", however, this is known in the art as taught by Uya et al. hereinafter Uya. Uya discloses the frame prototype image is generated by multiplying a texture value at a pixel by the original pixel value (Figure 5 where a frame image in Va is multiplied with a texture value in Vb; see Figure 8 and claim 1).

Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Uya into Oles because Oles discloses a method of generating a frame prototype image and Uya discloses a frame prototype image can be modified in order to assist design simulation.

Oles and Uya disclose a method of generating a frame prototype image. It is noted that Oles and Uya do not explicitly disclose using texture mapping the picture image of the frame image to generate the frame prototype image, however, this is known in the art as taught by Dawson et al., hereinafter Dawson. Dawson discloses a method of providing a texture mapped perspective view for digital map systems (column 2, line 61-62, since the digital map is a prototype image).

Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Dawson into Oles and Uya because Oles and Uya disclose a method of generating a prototype image and Dawson discloses the image texture can be texture mapped in perspective in order to enhance visual reality (column 1, line 50).

The instant application discloses "texture mapping the picture image to the picture portion of the frame image in order to generate the frame prototype image" and "multiplying a texture value at a pixel by the original pixel value of the picture image to generate the frame prototype image" in Page 6 Line 13 to Page 7 Line 5 and in Figure 4, Step 406.

The term "texture mapping" is a well defined technical terminology in the art. One can find a definition of "texture mapping" by simply search for the word "texture" at Wikimedia website at http://www.wikipedia.org/.

The definition for "texture mapping" is published at the URL

http://en.wikipedia.org/wiki/Texture_mapping as the follows:

> "Texture mapping is a method, pioneered by Edwin Catmull, of adding detail, surface texture, or colour to a computer-generated graphic or 3D model. A texture map is applied (mapped) to the surface of a shape."

Although Oles includes the display of a framed image, Oles does not teach "adding detail, surface texture, or colour" to "the frame prototype image". Oles thus does not disclose "texture mapping the picture image to the picture portion of the frame image in order to generate the frame prototype image". Furthermore, Oles also does not disclose "multiplying a texture value at a pixel by the original pixel value of the picture image to generate the frame prototype image".

Uya also does not teach "multiplying a texture value at a pixel by the original pixel value of the picture image to generate the frame prototype image". Figure 5 and Column 4 line 39-58 in Uya teach superimposing two image signals Va and Vb to derive a composite image Vout. Va includes a city map. Vb includes the image of a hand. The composite Vout includes the image of a hand pointing to a location on the map.

There is no teaching about "adding detail, surface texture, or colour" "to the surface of a shape." Vb is not a texture map. The image content of Va (the city map) is been changed by Vb (the hand image). Uya therefore does not teach "multiplying a texture value at a pixel by the original pixel value of the picture image to generate the frame prototype image".

In sum, Oles, Uya, or Dawson does not teach at least two steps (the step of "texture mapping" and the step of "multiplying a texture value") in claim 1 of the instant application. Oles, Uya, Dawson, singly or in combination, cannot render claim 1 obvious. Withdrawal of the Section 103 rejection on claims 1 and its associated dependent claims 2 to 11 is respectfully requested.

Claim 12 recites the following:

> A computer program product tangibly embodied in a computer-readable medium, for generating a frame prototype image showing a picture image framed within a frame, comprising instructions operable to cause a computer to:
> receive the picture image;
> store a frame image showing the frame in a perspective view and a mat identifying the picture portion of the frame image;
> texture map the picture image to the picture portion of the frame image in order to generate the frame prototype image; and

multiply a texture value at a pixel by the original pixel value of the picture image to generate the frame prototype image.

Similar to the arguments above in relation with claim 1, Oles, Uya, or Dawson does not teach the limitations of "a computer program comprising instructions operable to cause a computer to ... texture map the picture image to the picture portion of the frame image in order to generate the frame prototype image; and multiply a texture value at a pixel by the original pixel value of the picture image to generate the frame prototype image" in claim 12 of the instant application.

Oles, Uya, Dawson, singly or in combination, cannot render claim 12 obvious. Withdrawal of the Section 103 rejection on claims 12 and its associated dependent claims 13 to 15 is respectfully requested.

Claim 16 recites the following:

> A system for generating a frame prototype image showing a picture image framed within a frame, the system comprising:
> a client computer in communication with a computer network;
> a server, in communication with a computer network, having server software embodied in a computer-readable medium, the server software comprising instructions operable to cause the server to:
> receive the picture image from the client computer;
> store a frame image showing the frame in a perspective view and a mat identifying the picture portion of the frame image;
> texture map the picture image to the picture portion of the frame image in order to generate the frame prototype image; and
> multiply a texture value at a pixel by the original pixel value of the picture image to generate the frame prototype image,
> wherein the client computer includes client software embodied in a computer-readable medium, the client software comprising instructions operable to cause the client computer to upload the picture image to the server.

Similar to the arguments above in relation with claim 1, Oles, Uya, or Dawson does not teach the limitations of "the server software comprising instructions operable to cause the server to ... texture map the picture image to the picture portion of the frame image in order to generate the frame prototype image; and multiply a texture value at a pixel by the original pixel value of the picture image to generate the frame prototype image" in claim 16 of the instant application.

Oles, Uya, Dawson, singly or in combination, cannot render claim 16 obvious. Withdrawal of the Section 103 rejection on claims 16 is respectfully requested.

Claim 17 recites the following:

A method of generating a visual representation of an image based product, the method comprising:
providing an image to be included in the image based product;
providing a perspective image showing the image based product in a perspective view, the perspective image having a picture portion corresponding to the portion of the image based product used to view a picture mounted on the image based product; and
texture mapping the image to the picture portion of the perspective image in order to generate the perspective prototype image; and
multiplying a texture value at a pixel by the original pixel value of the picture image to generate the frame prototype image.

Similar to the arguments above in relation with claim 1, Oles, Uya, or Dawson does not teach the limitations of "texture mapping the image to the picture portion of the perspective image in order to generate the perspective prototype image; and multiplying a texture value at a pixel by the original pixel value of the picture image to generate the frame prototype image" in claim 17 of the instant application.

Oles, Uya, Dawson, singly or in combination, cannot render claim 16 obvious. Withdrawal of the Section 103 rejection on claims 17 and its associated dependent claims 17-21 is respectfully requested.

CONCLUSION

Applicants respectfully submit that all claims are in condition for allowance. Withdrawal of the rejection is respectfully requested. If for any reason the Examiner believes that a telephone conference would in any way expedite prosecution of the subject application, the Examiner is invited to telephone the undersigned.

Respectfully submitted,

Xin Wen

Reg. 53,758